$R \cdot I \cdot T$	Title: Nikon Microscope			
Semiconductor & Microsystems				
<b>Fabrication Laboratory</b>	Revision: A	Rev Date:03/23/04		
Approved by:  / / Process Engineer	Equipment Engineer			

## 1 SCOPE

The purpose of this document is to detail the use of the Nikon Microscope. All users are expected to have read and understood this document. It is not a substitute for in-person training on the system and is not sufficient to qualify a user on the system. Failure to follow guidelines in this document may result in loss of privileges.

## 2 REFERENCE DOCUMENTS

Appropriate Tool Manuals

### 3 <u>DEFINITIONS</u>

n/a

## 4 TOOLS AND MATERIALS

**4.1 General Description** – The Nikon Microscope has automatic fine focus and objective lens control. The image may be viewed on the Sony Monitor or digitally captured on the computer

## 5 <u>SAFETY PRECAUTIONS</u>

5.1 Objective lens should only be moved using the buttons located on the lower right of the microscope near the back.

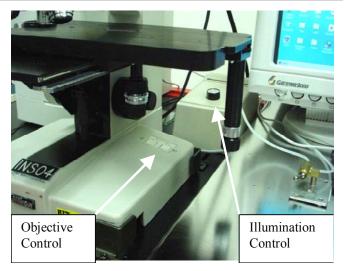
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## 6 <u>INSTRUCTIONS</u>

#### 6.1 Initial State Check

- 6.1.1 Turn on the computer and monitor if not already on.
- 6.1.2 Turn on the **Sony Camera Control Unit.** 
  - 6.1.2.1 Verify that unit is in **Auto**.
  - 6.1.2.2 **Mode** is set to **Auto**.
  - **6.1.2.3 Shutter** is **Off**.
  - 6.1.2.4 **Iris** is in **Auto**.
  - 6.1.2.5 Color temp is **5600K**.
- 6.1.3 Turn on the Sony Monitor and verify that **Input B** and **Digital** are selected.
- 6.1.4 Turn on the **Fine Focus Control** next to the microscope.
- 6.1.5 Turn on the **Nikon Illumination Control** behind the microscope.

### 6.2 Operating the system

- 6.2.1 The sample is held in place using the vacuum toggle switch located to the right of the microscope on the work surface.
- 6.2.2 The microscope objectives are switched using the two arrow buttons located on the lower right of the microscope near the back.
- 6.2.3 The coarse focus may be adjusted using the knob on the side of the microscope.
- 6.2.4 The fine focus may be adjusted using **Fine Focus Control** on the left side of the microscope.
- 6.2.4 The illumination intensity may be adjusted on the **Nikon Illumination Control** behind the microscope.

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### 6.3 Viewing and Capturing an Image on the Computer

- 6.3.1 On the computer open the **Video Viewer** icon.
- 6.3.2 Select Video and then Live to view the image.
- 6.3.3 To capture the image select Video and then Freeze.
- 6.3.4 Right click the image with the mouse and select Copy.
- 6.3.5 Close the Video Viewer.
- 6.3.6 Open the Microsoft Photo Editor icon.
- 6.3.7 Select File, New and then OK for a blank picture.
- 6.3.8 Right click and paste your image.
- 6.3.9 Save the file to a disk.

#### 6.4 Shutdown

- 6.4.1 Turn off the Nikon Illumination Control.
- 6.4.2 Turn off the Sony Monitor.
- 6.4.3 Turn off the Sony Camera Control Unit.
- 6.4.4 Turn off the computer monitor.

#### REVISION RECORD

Summary of Changes	Originator	Rev/Date
Original Issue	Sean O'Brien	A-02/23/04

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